

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/550,280  
Source: PCT  
Date Processed by STIC: 10/06/2005

# ***ENTERED***



PCT

## RAW SEQUENCE LISTING

DATE: 10/06/2005

PATENT APPLICATION: US/10/550,280

TIME: 11:41:37

Input Set : A:\Sequence Listing 2005\_1500A.txt

Output Set: N:\CRF4\10062005\J550280.raw

3 <110> APPLICANT: NIPPON MEDICAL SCHOOL FOUNDATION  
 5 <120> TITLE OF INVENTION: Cell death-inducing fusion gene specifically acting on  
 cancer and  
 6 gene product thereof  
 8 <130> FILE REFERENCE: PH-2011-PCT  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/550,280  
 C--> 11 <141> CURRENT FILING DATE: 2005-09-23  
 13 <150> PRIOR APPLICATION NUMBER: JP2003/081337  
 14 <151> PRIOR FILING DATE: 2003-03-24  
 16 <160> NUMBER OF SEQ ID NOS: 27  
 17 <170> SOFTWARE: PatentIn Ver. 2.1  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 579  
 21 <212> TYPE: DNA  
 22 <213> ORGANISM: Homo sapiens  
 24 <220> FEATURE:  
 25 <221> NAME/KEY: CDS  
 26 <222> LOCATION: (1)..(579)  
 28 <400> SEQUENCE: 1

29 atg gac ggg tcc ggg gag cag ccc aga ggc ggg ggg ccc acc agc tct 48  
 30 Met Asp Gly Ser Gly Glu Gln Pro Arg Gly Gly Gly Pro Thr Ser Ser  
 31 1 5 10 15  
 33 gag cag atc atg aag aca ggg gcc ctt ttg ctt cag ggt ttc atc cag 96  
 34 Glu Gln Ile Met Lys Thr Gly Ala Leu Leu Leu Gln Gly Phe Ile Gln  
 35 20 25 30  
 37 gat cga gca ggg cga atg ggg ggg gag gca ccc gag ctg gcc ctg gac 144  
 38 Asp Arg Ala Gly Arg Met Gly Gly Glu Ala Pro Glu Leu Ala Leu Asp  
 39 35 40 45  
 41 ccg gtg cct cag gat gcg tcc acc aag aag ctg agc gag tgt ctc aag 192  
 42 Pro Val Pro Gln Asp Ala Ser Thr Lys Lys Leu Ser Glu Cys Leu Lys  
 43 50 55 60  
 45 cgc atc ggg gac gaa ctg gac agt aac atg gag ctg cag agg atg att 240  
 46 Arg Ile Gly Asp Glu Leu Asp Ser Asn Met Glu Leu Gln Arg Met Ile  
 47 65 70 75 80  
 49 gcc gcc gtg gac aca gac tcc ccc cga gag gtc ttt ttc cga gtg gca 288  
 50 Ala Ala Val Asp Thr Asp Ser Pro Arg Glu Val Phe Phe Arg Val Ala  
 51 85 90 95  
 53 gct gac atg ttt tct gac ggc aac ttc aac tgg ggc cgg gtt gtc gcc 336  
 54 Ala Asp Met Phe Ser Asp Gly Asn Phe Asn Trp Gly Arg Val Val Ala  
 55 100 105 110  
 57 ctt ttc tac ttt gcc agc aaa ctg gtg ctc aag gcc ctg tgc acc aag 384  
 58 Leu Phe Tyr Phe Ala Ser Lys Leu Val Leu Lys Ala Leu Cys Thr Lys  
 59 115 120 125  
 61 gtg ccg gaa ctg atc aga acc atc atg ggc tgg aca ttg gac ttc ctc 432

(CPg-6)

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62 Val Pro Glu Leu Ile Arg Thr Ile Met Gly Trp Thr Leu Asp Phe Leu
63      130                      135                      140
65 cgg gag cgg ctg ttg ggc tgg atc caa gac cag ggt ggt tgg gac ggc      480
66 Arg Glu Arg Leu Leu Gly Trp Ile Gln Asp Gln Gly Gly Trp Asp Gly
67 145                      150                      155                      160
69 ctc ctc tcc tac ttt ggg acg ccc acg tgg cag acc gtg acc atc ttt      528
70 Leu Leu Ser Tyr Phe Gly Thr Pro Thr Trp Gln Thr Val Thr Ile Phe
71                      165                      170                      175
73 gtg gcg gga gtg ctc acc gcc tcg ctc acc atc tgg aag aag atg ggc      576
74 Val Ala Gly Val Leu Thr Ala Ser Leu Thr Ile Trp Lys Lys Met Gly
75                      180                      185                      190
77 tga                                                                    579
80 <210> SEQ ID NO: 2
81 <211> LENGTH: 192
82 <212> TYPE: PRT
83 <213> ORGANISM: Homo sapiens
85 <400> SEQUENCE: 2
86 Met Asp Gly Ser Gly Glu Gln Pro Arg Gly Gly Gly Pro Thr Ser Ser
87 1      5      10      15
88 Glu Gln Ile Met Lys Thr Gly Ala Leu Leu Gln Gly Phe Ile Gln
89      20      25      30
90 Asp Arg Ala Gly Arg Met Gly Gly Glu Ala Pro Glu Leu Ala Leu Asp
91      35      40      45
92 Pro Val Pro Gln Asp Ala Ser Thr Lys Lys Leu Ser Glu Cys Leu Lys
93      50      55      60
94 Arg Ile Gly Asp Glu Leu Asp Ser Asn Met Glu Leu Gln Arg Met Ile .
95 65      70      75      80
96 Ala Ala Val Asp Thr Asp Ser Pro Arg Glu Val Phe Phe Arg Val Ala
97      85      90      95
98 Ala Asp Met Phe Ser Asp Gly Asn Phe Asn Trp Gly Arg Val Val Ala
99      100     105     110
100 Leu Phe Tyr Phe Ala Ser Lys Leu Val Leu Lys Ala Leu Cys Thr Lys
101      115     120     125
102 Val Pro Glu Leu Ile Arg Thr Ile Met Gly Trp Thr Leu Asp Phe Leu
103      130     135     140
104 Arg Glu Arg Leu Leu Gly Trp Ile Gln Asp Gln Gly Gly Trp Asp Gly
105 145     150     155     160
106 Leu Leu Ser Tyr Phe Gly Thr Pro Thr Trp Gln Thr Val Thr Ile Phe
107      165     170     175
108 Val Ala Gly Val Leu Thr Ala Ser Leu Thr Ile Trp Lys Lys Met Gly
109      180     185     190
113 <210> SEQ ID NO: 3
114 <211> LENGTH: 999
115 <212> TYPE: DNA
116 <213> ORGANISM: Homo sapiens
118 <220> FEATURE:
119 <221> NAME/KEY: CDS
120 <222> LOCATION: (1)..(999)
122 <400> SEQUENCE: 3

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## RAW SEQUENCE LISTING

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```

123 atg gcc tgc gat tgc cgt ggt gat tgt ttt tgt ggt ggt atg agc aag 48
124 Met Ala Cys Asp Cys Arg Gly Asp Cys Phe Cys Gly Gly Met Ser Lys
125 1 5 10 15
127 ggc gag gaa ctg ttc act ggc gtg gtc cca att ctc gtg gaa ctg gat 96
128 Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val Glu Leu Asp
129 20 25 30
131 ggc gat gtg aat ggg cac aaa ttt tct gtc agc gga gag ggt gaa ggt 144
132 Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu Gly Glu Gly
133 35 40 45
135 gat gcc aca tac gga aag ctc acc ctg aaa ttc atc tgc acc act gga 192
136 Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys Thr Thr Gly
137 50 55 60
139 aag ctc cct gtg cca tgg cca aca ctg gtc act acc ttc acc tat ggc 240
140 Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Phe Thr Tyr Gly
141 65 70 75 80
143 gtg cag tgc ttt tcc aga tac cca gac cat atg aag cag cat gac ttt 288
144 Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Gln His Asp Phe
145 85 90 95
147 ttc aag agc gcc atg ccc gag ggc tat gtg cag gag aga acc atc ttt 336
148 Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg Thr Ile Phe
149 100 105 110
151 ttc aaa gat gac ggg aac tac aag acc cgc gct gaa gtc aag ttc gaa 384
152 Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val Lys Phe Glu
153 115 120 125
155 ggt gac acc ctg gtg aat aga atc gag ctg aag ggc att gac ttt aag 432
156 Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile Asp Phe Lys
157 130 135 140
159 gag gat gga aac att ctc ggc cac aag ctg gaa tac aac tat aac tcc 480
160 Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn Tyr Asn Ser
161 145 150 155 160
163 cac aat gtg tac atc atg gcc gac aag caa aag aat ggc atc aag gtc 528
164 His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly Ile Lys Val
165 165 170 175
167 aac ttc aag atc aga cac aac att gag gat gga tcc gtg cag ctg gcc 576
168 Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser Val Gln Leu Ala
169 180 185 190
171 gac cat tat caa cag aac act cca atc ggc gac ggc cct gtg ctc ctc 624
172 Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro Val Leu Leu
173 195 200 205
175 cca gac aac cat tac ctg tcc acc cag tct gcc ctg tct aaa gat ccc 672
176 Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser Lys Asp Pro
177 210 215 220
179 aac gaa aag aga gac cac atg gtc ctg ctg gag ttt gtg acc gct gct 720
180 Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe Val Thr Ala Ala
181 225 230 235 240
183 ggg atc aca cat ggc atg gac gag ctg tac aag gcc ctt ttc tac ttt 768
184 Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys Ala Leu Phe Tyr Phe
185 245 250 255
187 gcc agc aaa ctg gtg ctc aag gcc ctg tgc acc aag gtg ccg gaa ctg 816

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188 Ala Ser Lys Leu Val Leu Lys Ala Leu Cys Thr Lys Val Pro Glu Leu
189          260          265          270
190 atc aga acc atc atg ggc tgg aca ttg gac ttc ctc cgg gag cgg ctg      864
191 Ile Arg Thr Ile Met Gly Trp Thr Leu Asp Phe Leu Arg Glu Arg Leu
192          275          280          285
194 ttg ggc tgg atc caa gac cag ggt ggt tgg gac ggc ctc ctc tcc tac      912
195 Leu Gly Trp Ile Gln Asp Gln Gly Gly Trp Asp Gly Leu Leu Ser Tyr
196          290          295          300
198 ttt ggg acg ccc acg tgg cag acc gtg acc atc ttt gtg gcg gga gtg      960
199 Phe Gly Thr Pro Thr Trp Gln Thr Val Thr Ile Phe Val Ala Gly Val
200 305          310          315          320
202 ctc acc gcc tca ctc acc atc tgg aag aag atg ggc tga      999
203 Leu Thr Ala Ser Leu Thr Ile Trp Lys Lys Met Gly
204          325          330
207 <210> SEQ ID NO: 4
208 <211> LENGTH: 332
209 <212> TYPE: PRT
210 <213> ORGANISM: Homo sapiens
212 <400> SEQUENCE: 4
213 Met Ala Cys Asp Cys Arg Gly Asp Cys Phe Cys Gly Gly Met Ser Lys
214 1          5          10          15
215 Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val Glu Leu Asp
216          20          25          30
217 Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu Gly Glu Gly
218          35          40          45
219 Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys Thr Thr Gly
220          50          55          60
221 Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Phe Thr Tyr Gly
222 65          70          75          80
223 Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Gln His Asp Phe
224          85          90          95
225 Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg Thr Ile Phe
226          100          105          110
227 Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val Lys Phe Glu
228          115          120          125
229 Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile Asp Phe Lys
230          130          135          140
231 Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn Tyr Asn Ser
232 145          150          155          160
233 His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly Ile Lys Val
234          165          170          175
235 Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser Val Gln Leu Ala
236          180          185          190
237 Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro Val Leu Leu
238          195          200          205
239 Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser Lys Asp Pro
240          210          215          220
241 Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe Val Thr Ala Ala
242 225          230          235          240

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```

243 Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys Ala Leu Phe Tyr Phe
244                               245                               250                               255
245 Ala Ser Lys Leu Val Leu Lys Ala Leu Cys Thr Lys Val Pro Glu Leu
246                               260                               265                               270
247 Ile Arg Thr Ile Met Gly Trp Thr Leu Asp Phe Leu Arg Glu Arg Leu
248                               275                               280                               285
249 Leu Gly Trp Ile Gln Asp Gln Gly Gly Trp Asp Gly Leu Leu Ser Tyr
250                               290                               295                               300
251 Phe Gly Thr Pro Thr Trp Gln Thr Val Thr Ile Phe Val Ala Gly Val
252 305                               310                               315                               320
253 Leu Thr Ala Ser Leu Thr Ile Trp Lys Lys Met Gly
254                               325                               330
258 <210> SEQ ID NO: 5
259 <211> LENGTH: 987
260 <212> TYPE: DNA
261 <213> ORGANISM: Homo sapiens
263 <220> FEATURE:
264 <221> NAME/KEY: CDS
265 <222> LOCATION: (1)..(987)
267 <400> SEQUENCE: 5
268 atg gcc tgc aac ggt cgt tgc ggt ggt atg agc aag ggc gag gaa ctg 48
269 Met Ala Cys Asn Gly Arg Cys Gly Gly Met Ser Lys Gly Glu Glu Leu
270 1 5 10 15
272 ttc act ggc gtg gtc cca att ctc gtg gaa ctg gat ggc gat gtg aat 96
273 Phe Thr Gly Val Val Pro Ile Leu Val Glu Leu Asp Gly Asp Val Asn
274 20 25 30
275 ggg cac aaa ttt tct gtc agc gga gag ggt gaa ggt gat gcc aca tac 144
276 Gly His Lys Phe Ser Val Ser Gly Glu Gly Glu Gly Asp Ala Thr Tyr
277 35 40 45
279 gga aag ctc acc ctg aaa ttc atc tgc acc act gga aag ctc cct gtg 192
280 Gly Lys Leu Thr Leu Lys Phe Ile Cys Thr Thr Gly Lys Leu Pro Val
281 50 55 60
283 cca tgg cca aca ctg gtc act acc ttc acc tat ggc gtg cag tgc ttt 240
284 Pro Trp Pro Thr Leu Val Thr Thr Phe Thr Tyr Gly Val Gln Cys Phe
285 65 70 75 80
287 tcc aga tac cca gac cat atg aag cag cat gac ttt ttc aag agc gcc 288
288 Ser Arg Tyr Pro Asp His Met Lys Gln His Asp Phe Phe Lys Ser Ala
289 85 90 95
291 atg ccc gag ggc tat gtg cag gag aga acc atc ttt ttc aaa gat gac 336
292 Met Pro Glu Gly Tyr Val Gln Glu Arg Thr Ile Phe Phe Lys Asp Asp
293 100 105 110
295 ggg aac tac aag acc cgc gct gaa gtc aag ttc gaa ggt gac acc ctg 384
296 Gly Asn Tyr Lys Thr Arg Ala Glu Val Lys Phe Glu Gly Asp Thr Leu
297 115 120 125
299 gtg aat aga atc gag ctg aag ggc att gac ttt aag gag gat gga aac 432
300 Val Asn Arg Ile Glu Leu Lys Gly Ile Asp Phe Lys Glu Asp Gly Asn
301 130 135 140
303 att ctc ggc cac aag ctg gaa tac aac tat aac tcc cac aat gtg tac 480
304 Ile Leu Gly His Lys Leu Glu Tyr Asn Tyr Asn Ser His Asn Val Tyr

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/550,280

DATE: 10/06/2005  
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Input Set : A:\Sequence Listing 2005\_1500A.txt  
Output Set: N:\CRF4\10062005\J550280.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:19; N Pos. 1,2

Seq#:22; N Pos. 1,2

Seq#:24; N Pos. 1,2,3,4

Seq#:27; N Pos. 1,2,3,4

## VERIFICATION SUMMARY

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Input Set : A:\Sequence Listing 2005\_1500A.txt

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L:10 M:270 C: Current Application Number differs, Replaced Application Number  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:420 M:283 W: Missing Blank Line separator, <220> field identifier  
L:448 M:283 W: Missing Blank Line separator, <400> field identifier  
L:476 M:283 W: Missing Blank Line separator, <400> field identifier  
L:571 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:609 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0  
L:636 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0  
L:667 M:283 W: Missing Blank Line separator, <220> field identifier  
L:673 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0